Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1.   (Original) A method of operating a plurality of virus checkers for on-demand anti-virus scanning concurrent with on-access anti-virus scanning, the method comprising:

combining on-demand anti-virus scan requests and on-access anti-virus scan requests in a virus scan request queue; and

distributing the on-demand anti-virus scan requests and the on-access anti-virus scan requests from the virus scan request queue to the virus checkers.

2.   (Original) The method as claimed in claim 1, wherein the on-access anti-virus scan requests are produced in response to user access to files.

3.   (Original) The method as claimed in claim 1, wherein the on-demand anti-virus scan requests are produced in response to a system administrator requesting a scan of files within a specified file system.

4.   (Original) The method as claimed in claim 1, wherein a pool of threads distribute the on-demand anti-virus scan requests and the on-access anti-virus scan requests from the virus scan

request queue to the virus checkers, each anti-virus scan request on the virus scan request queue

being serviced by a respective one of the threads in the pool of threads.

5.   (Original) The method as claimed in claim 1, wherein the on-access anti-virus scan

requests are given priority over the on-demand anti-virus scan requests by inhibiting the

placement of on-demand anti-virus scan requests onto the virus scan request queue when the

number of anti-virus scan requests on the virus scan request queue reaches a threshold, and not

inhibiting the placement of on-access anti-virus scan requests onto the virus scan request queue

when the number of anti-virus scan requests on the virus scan request queue reaches the

threshold.

6.   (Currently amended) The method as claimed in claim 1, which includes grouping the on-

demand anti-virus scan requests into chunks, each of the chunks including [[of]] multiple ones of

the on-demand anti-virus scan requests, and placing the chunks onto the virus scan request

queue.

7.   (Currently amended) The method as claimed in claim [[5]] 6, which includes inhibiting

the placement of at least one of the chunks onto the virus scan request queue until completion of

anti-virus scanning for the anti-virus scan requests in a prior one of the chunks.

8.   (Currently amended) A method of operating a plurality of virus checkers, the method

comprising:

distributing on-demand anti-virus scan requests and on-access anti-virus scan requests to

the virus checkers so that the virus checkers perform on-demand anti-virus scanning concurrent

with on-access anti-virus scanning;

which includes grouping the on-demand anti-virus scan requests into chunks, each of the

chunks including [[of]] multiple ones of the on-demand anti-virus scan requests, and for each

chunk, distributing the multiple ones of the on-demand anti-virus scan requests over the virus

checkers.

9.   (Original) The method as claimed in claim 8, wherein the on-access anti-virus scan

requests are produced in response to user access to files.

10.   (Original) The method as claimed in claim 8, wherein the on-demand anti-virus scan

requests are produced in response to a system administrator requesting a scan of files within a

specified file system.

11.   (Original) The method as claimed in claim 8, which includes inhibiting the distribution

of the multiple ones of the on-demand anti-virus scan requests from at least one of the chunks to

the virus checkers until completion of anti-virus scanning for the anti-virus scan requests in a

prior one of the chunks.

12.   (Currently amended) A method of operating a plurality of virus checkers for on-demand

anti-virus scanning concurrent with on-access anti-virus scanning, the method comprising:

combining on-demand anti-virus scan requests and on-access anti-virus scan requests in a

virus scan request queue; and

a pool of threads distributing the on-demand anti-virus scan requests and the on-access

anti-virus scan requests from the virus scan request queue to the virus checkers, each anti-virus

scan request on the virus scan request queue being serviced by a respective one of the threads in

the pool of threads,

which includes grouping the on-demand anti-virus scan requests into chunks, each of the

chunks including [[of]] multiple ones of the on-demand anti-virus scan requests, and for each

chunk, checking whether the number of anti-virus scan requests on the virus checking queue is

less than a threshold, and upon finding that the number of anti-virus scan requests on the virus

checking queue is less than the threshold, placing said each chunk on the virus scan request

queue.

13.   (Original) The method as claimed in claim 12, wherein the on-access anti-virus scan

requests are produced in response to user access to files.

14.   (Original) The method as claimed in claim 12, wherein the on-demand anti-virus scan

requests are produced in response to a system administrator requesting a scan of files within a

specified file system.

15.   (Original) The method as claimed in claim 12, which includes inhibiting the placement of at least one of the chunks onto the virus scan request queue until completion of anti-virus scanning for the anti-virus scan requests in a prior one of the chunks.

16.   (Original) A virus checking system comprising:

a plurality of virus checkers for on-demand anti-virus scanning concurrent with on-access anti-virus scanning;

a virus scan request queue; and

at least one processor coupled to the virus checkers and the virus scan request queue for sending virus scan requests from the virus scan request queue to the virus checkers, said at least one processor being programmed for placing on-demand anti-virus scan requests and on-access anti-virus scan requests onto the virus scan request queue, and for distributing the on-demand anti-virus scan requests and the on-access virus scan requests from the virus scan request queue to the virus checkers.

17.   (Original) The virus checking system as claimed in claim 16, wherein said at least one processor and said virus scan request queue are in a file server, and the virus checkers are separate from the file server.

18.   (Original) The virus checking system as claimed in claim 16, wherein said at least one processor is programmed to place each on-access request onto the virus scan request queue in response to user access of a respective file.

19.   (Original) The virus checking system as claimed in claim 16, wherein said at least one processor is programmed to produce the on-demand anti-virus scan requests in response to a system administrator requesting a scan of files within a specified file system.

20.   (Original) The virus checking system as claimed in claim 16, wherein said at least one processor is programmed to execute multiple threads for distributing the on-demand anti-virus scan requests and the on-access anti-virus scan requests from the virus scan request queue to the virus checkers, each anti-virus scan request on the virus scan request queue being serviced by a respective one of the threads in the pool of threads.

21.   (Original) The virus checking system as claimed in claim 16, wherein said at least one processor is programmed for giving the on-access anti-virus scan requests priority over the on-demand anti-virus scan requests by inhibiting the placement of on-demand anti-virus scan requests onto the virus scan request queue when the number of anti-virus scan requests on the virus scan request queue reaches a threshold, and not inhibiting the placement of on-access anti-virus scan requests onto the virus scan request queue when the number of anti-virus scan requests on the virus scan request queue reaches the threshold.

22.   (Currently amended) The virus checking system as claimed in claim 16, wherein said at least one of the processors is programmed for grouping the on-demand anti-virus scan requests ~~onto~~ into chunks, each of the chunks including [[of]] multiple ones of the on-demand anti-virus scan requests, and placing the chunks onto the virus scan request queue.

23.   (Original) The virus checking system as claimed in claim 22, which includes inhibiting the placement of at least one of the chunks onto the virus scan request queue until completion of anti-virus scanning for the anti-virus scan requests in a prior one of the chunks.

24.   (Currently amended) A virus checking system comprising:

a plurality of virus checkers for on-demand anti-virus scanning concurrent with on-access anti-virus scanning; and

a file server coupled to the virus checkers for sending virus scan requests to the virus checkers, the file server including a virus scan request queue, and the file server being programmed for placing on-demand anti-virus scan requests and on-access anti-virus scan requests onto the virus scan request queue; and for executing multiple threads for distributing the on-demand anti-virus scan requests and the on-access anti-virus scan requests from the virus scan request queue to the virus checkers, each anti-virus scan request on the virus scan request queue being serviced by a respective one of the threads in the pool of threads, the file server further being programmed for grouping the on-demand anti-virus scan requests into chunks, each of the chunks including [[of]] multiple ones of the on-demand anti-virus scan requests, and for consecutively placing the chunks onto the virus scan request queue.

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25.   (Original) The virus checking system as claimed in claim 24, wherein the file server is programmed for producing the on-access anti-virus scan requests in response to user access to files.

26.   (Original) The virus checking system as claimed in claim 24, wherein the file server is programmed to produce the on-demand anti-virus scan requests in response to a system administrator requesting a scan of files within a specified file system.

27.   (Original) The virus checking system as claimed in claim 24, wherein the file server is programmed for checking for each chunk whether the number of anti-virus scan requests on the virus checking queue is less than a threshold, and upon finding that the number of anti-virus scan requests on the virus checking queue is less than the threshold, placing said each chunk on the virus scan request queue.

28.   (Original) The virus checking system as claimed in claim 24, wherein the file server is programmed for inhibiting the placement of at least one of the chunks onto the virus scan request queue until completion of anti-virus scanning for the anti-virus scan requests in a prior one of the chunks.